

REMARKS

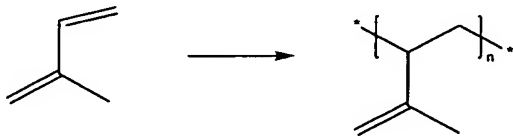
Applicants acknowledge receipt of an Office Action dated March 27, 2008. In this response, Applicant has amended claim 1. New claim 15 is added. Support for new claim 15 can be found in the specification as originally filed, *inter alia*, on page 12, line 8 – page 14, line 6; and on page 14, lines 14-26. Following entry of this amendment, claims 1-15 remain pending in the application.

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Rejection Under 35 U.S.C. § 112, Second Paragraph

On page 2 of the Office Action, the PTO has rejected claims 1-14 under 35 U.S.C. § 112, second paragraph as being allegedly indefinite because the term “vinylisoprene is unclear in that isoprene has several points of attachment where a substituents can be placed.” Applicants respectfully traverse this rejection for at least the reasons set forth below.

As attested to in the declaration by Petrus Karsten, co-inventor in the above-captioned application, submitted herewith under 37 C.F.R. §§ 1.32 (hereafter Declaration), vinylisoprene unit stems from isoprene (2-methyl-1,3-butadiene). Declaration, para. 10. An isoprene unit is connected into the polymer chain with both double bonds of the butadiene and a vinylisoprene unit is connected into the polymer chain with one of the double bonds, as illustrated below:



. Declaration, para. 10.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the outstanding rejection under § 112, second paragraph.

Rejections Under 35 U.S.C. § 103

On page 2 of the Office Action, the PTO has rejected claims 1-14 under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent Application Publication 2004/0127614 to Jiang *et al.* (hereafter “Jiang”). On page 3 of the Office Action, the PTO

has rejected claims 1-3, 5, 10-11, and 14 under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent Application Publication 2004/0151933 to Ajbani *et al.* (hereafter “Ajbani”). In addition, on page 3 of the Office Action, the PTO has rejected claims 1-3 and 10-14 as under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent Application Publication 2003/0049477 to Morizono *et al.* (hereafter “Morizono”). Applicants traverse these rejections for at least the reasons set forth below.

The framework for the objective analysis for determining obviousness under §103 requires:

1. Determining the scope and content of the prior art;
2. Ascertaining the differences between the claimed invention and the prior art;
3. Resolving the level of ordinary skill in the pertinent art; and
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Teleflex, Inc. v. KSR Int’l Co., 127 S. Ct. 1727, 82 USPQ2d 1385 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

Here, Jiang, Ajbani, and Morizono whether taken individually or in combination, fail to teach or suggest a polymer comprising “a syndiotactic polypropylene and a thermoplastic elastomer including styrene and isoprene units and at least one of vinylisoprene or butadiene units” as recited in claim 1.

Jiang relates to polymer compositions comprising olefins and a process to produce an olefin polymer using catalysts. Abstract. Jiang contains many laundry lists of polymers and additives, however fails to teach or suggest any motivation for combining “a syndiotactic polypropylene and a thermoplastic elastomer including styrene and isoprene units and at least one of vinylisoprene or butadiene units” as presently claimed. On page 2 of the Office Action, the PTO relies on paragraph [0297] of Jiang for the proposition that the olefin polymer may include syndiotactic polypropylene. However, Jiang merely states that at least one of the catalysts “must be capable of producing a crystalline poly-alpha-olefin, preferably isotactic polypropylene or syndiotactic polypropylene,” and the other catalyst “must be capable of producing an amorphous poly-alpha-olefin, preferably atactic polypropylene.” Jiang [0297]. The compositions disclosed in Jiang are atactic polypropylene grafted to a semicrystalline polypropylene. Jiang [0163]. However, there is nothing contained within

Jiang that teaches or suggests choosing a combination of syndiotactic polypropylene and an “elastomer including styrene and isoprene units and at least one of vinylisoprene or butadiene units” as presently claimed.

Furthermore, Jiang actually teaches away from the presently claimed invention. Jiang is directed “to adhesives comprising polymers of C3-40 olefins” and the compositions within Jiang are all compositions with adhesive properties. Jiang [0003]. The polymers of the presently claimed invention can be used in multilayer structures in the medical field, and therefore do not and cannot have the adhesive qualities of Jiang.

Ajbani is directed to “a soft thermoplastic elastomer composition overmolded on a hard substrate.” Ajbani [0002]. As noted by the PTO, the composition of Ajbani includes component c, which “may be a styrene-isoprene/butadiene-styrene block copolymer.” However, the composition of Ajbani does not specifically teach or suggest the presently claimed composition polymer “a syndiotactic polypropylene and a thermoplastic elastomer including styrene and isoprene units and at least one of vinylisoprene or butadiene units.” There is an improved compatibility between these two polymers, which results in improved transparency. This improved transparency is demonstrated in the application by comparing the results achieved in Examples 4-10 and 12-13 with Comparative Examples 1-3 and 11.

Furthermore, additional experimental testing was completed on the presently claimed polymers as described in the Declaration. “Twelve mixtures of 20, 50, or 80% syndiotactic polypropylene (s-PP 1251) with the four elastomers were prepared ... and then extruded into rods of 5 mm diameter ... [that] were pressed at 170°C into thin sheets of 400 µm.” Declaration, para. 15-16. As illustrated in Table 2, “the compositions containing s-PP/Hybrar® 7125 and s-PP/ Kraton® G1730 have a significantly lower haze as compared to the s-PP/Kraton® G1726 and s-PP/Septon® 2004 compositions.” Declaration, para. 18. Additionally, the “80/20 blends of the compositions containing s-PP/Hybrar® 7125 and s-PP/ Kraton® G1730 show a much higher peak load than the s-PP/Kraton® G1726 and s-PP/Septon® 2004 compositions, signifying a higher stiffness ... [and the] 20/80 blends of the compositions containing s-PP/Hybrar® 7125 and s-PP/ Kraton® G1730 show a much higher elongation than the s-PP/Kraton® G1726 and s-PP/Septon® 2004 compositions, signifying improved compatability.” Declaration, para. 20-21.

Morizono discloses a polymer comprising a syndiotactic propylene polymer, an α -olefin polymer, and other optional additives. Morizono [0011]-[0016]. Although Morizono discloses that a styrene butadiene/isoprene block copolymer may be used in the invention, this is just one possibility amongst hundreds of different polymers that are listed as a possible combination with the disclosed polymer. There is no teaching or suggestion for a polymer comprising “a syndiotactic polypropylene and a thermoplastic elastomer including styrene and isoprene units and at least one of vinylisoprene or butadiene units” as presently claimed.

For at least these reasons, Applicants submit that the outstanding rejections based upon Jiang, Ajbani, and Morizono are improper and ought to be withdrawn.

If an independent claim is nonobvious under § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). See MPEP 2143.03. Thus, Applicants submit that claims 2-14, each of which ultimately depends from independent claim 1, are also non-obvious at least by virtue of their dependency from claim 1.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections under § 103.

Newly Added Claim

In this response, Applicants have added claim 15 which ultimately depends from claim 1, respectively. Applicants believe that claim 15 is allowable by virtue of its dependency from claim 1 and also because of the additional features recited in the claim.

CONCLUSION

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.


The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the

Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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